

New Product: Cisco 806 — Broadband Gateway Router

Product Overview

The Cisco 806 Broadband Gateway router offers multiuser access with a single broadband connection along with enhanced network security and reliability through the power of Cisco IOS technology. The Cisco 806 router is tailored for small offices and telecommuters who require addition business class features that simple broadband modems do not provide.

The Cisco 806 router is a fixed configuration dual Ethernet router, and users can add business class features such as a stateful inspection firewall, support for VPNs, and Quality of Service Features (QoS) to any type of broadband connection. Enterprise customers can standardize on one single device to connect small remote offices and teleworkers no matter what type of broadband service is available for those employees. Service providers can use the 806 to enable revenue generating business class services to existing customers and infrastructure as well as offer a clear demarcation point between WAN services (broadband modem) and value added services such as managed VPNs and Firewalls. Resellers also benefit from the Cisco 806 by using the 806 in conjunction with the CPE that comes with a customers' broadband service. The 806 allows resellers to provide value added services for business customers beyond simple internet access.

Because the 806 is a router based solution, multiple users can share a single broadband connection with a single public IP address. Additionally, the Cisco 806 router gains all the advantages of Cisco IOS software's reliability and remote management capabilities. The Cisco 806 router can be easily set up through any web browser using the Cisco Router Web Set Up tool. Additionally, the Cisco 806 router provides QoS features for traffic management with delay sensitive applications such as voice and video, something broadband modems and security appliances can not provide.

Figure 19-55: Cisco 806 , front view

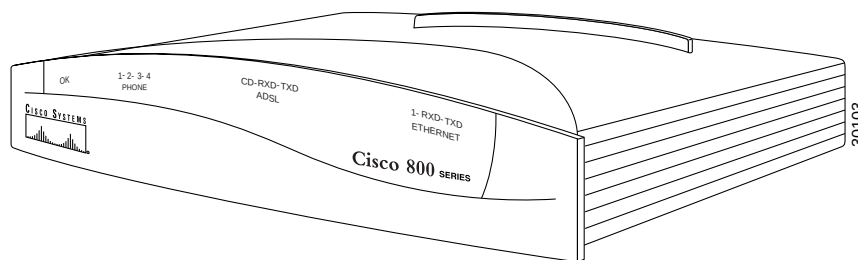
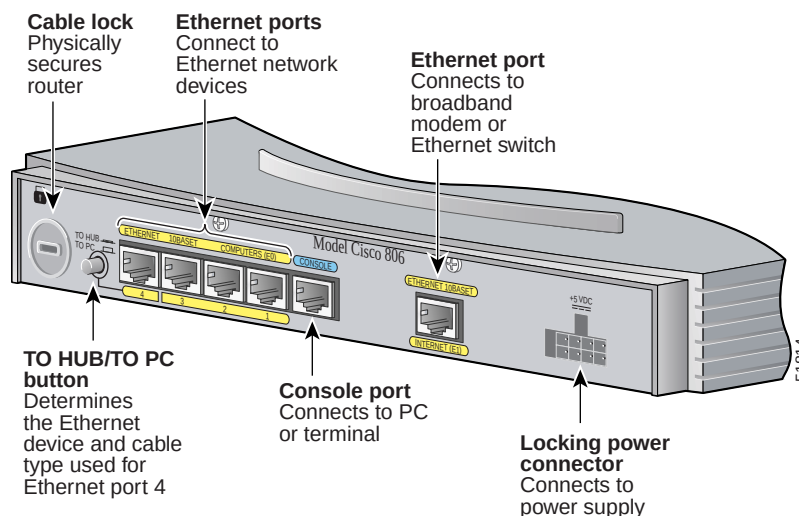


Figure 19-56: Cisco 806 Series, rear view



Key Features and Benefits

Multiusers Access

Through Network Address Translation (NAT) the Cisco 806 router allows multiple users to share a single broadband connection. Additionally, an integrated 4 port Ethernet hub allows up to four PCs or networking devices to be connected directly to the router.

Business Class Security

To leverage the unprecedented opportunities offered by communications and commerce over the Internet, private information must remain secure. Cisco Secure Integrated Software provides many technologies to build a custom security solution. The elements of security services include perimeter security, identity, monitoring, privacy, firewalls, IPSec encryption, and VPNs.

Standard Security

Perimeter security refers to the control of traffic entry and exit between network boundaries, such as between private networks, intranets, extranets, or the Internet. Cisco IOS perimeter security technologies provide a highly flexible, superior solution with features such as:

- Standard and extended ACLs
- Lock and Key (dynamic ACLs)
- Router/route authentication, authorization, and accounting (such as Password Authentication Protocol [PAP]/Challenge Handshake Authentication Protocol [CHAP])
- Network Address Translation (NAT)
- Token Card authentication with Cisco Secure authentication
- NAT eliminates the need to re-address all hosts with existing private network addresses and hides internal addresses from public view. For businesses that want to allow selected access to the network, NAT can be configured to allow only certain types of data requests such as Web browsing, e-mail, or file transfers.

Enhanced Security

Dynamic or Stateful Firewall—Companies increasingly rely on internal networks and servers for accessing company data. To leverage the Internet as a key business tool, companies must connect their internal networks to the Internet while keeping sensitive internal data secure. Company data can be protected against unauthorized access with stateful firewalls. The integrated Cisco IOS Firewall Feature Set is a stateful firewall that provides:

- Stateful (dynamic) ACLs (application/context based)
- Java blocking
- Denial of service attack detection and prevention
- Real-time alerts and audit trails
- Dynamic firewalls provide these vital enhanced security features. The term firewall is used by many vendors but not uniformly referred to as stateful firewalls. Firewalls that are not dynamic do not provide these enhanced security features.
- SSH for encrypted administration - Allows the router to be managed remotely with encrypted text for updating or changing configuration commands

VPN Support

The Cisco 806 provides optional IPSec encryption technology to enable small offices and telecommuters to utilize VPNs. IPSec encryption provides privacy, integrity, and authenticity for transmission of sensitive information over the Internet. The unique end-to-end Cisco offering allows customers to implement IPSec encryption transparently into the network without affecting individual PCs. The Cisco 806 router supports:

- IPSec tunneling with data encryption standard (DES)

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- Layer-2 Tunneling Protocol (L2TP)
 - Generic Routing Encapsulation (GRE)

Manageability & Reliability with Cisco IOS Technology

Since the Cisco 806 router runs Cisco IOS software users can utilize powerful remote management capabilities. The Cisco 806 router can support software and memory upgrades and Cisco IOS software provides remotely monitoring and troubleshooting tools that help reduce the ongoing lifecycle costs of the product.

The Cisco 806 accommodates PPPoE , required for some DSL connections, and Hostname entry, required for some cable connections. These are defined using the integrated Cisco Router Web Set Up tool.

The Cisco 806 router uses the Cisco Router Web Set Up tool, a web based configuration tool, to allow users without knowledge of Cisco IOS to quickly set the router and enable features such as NAT, Firewall, and router security.

Certified with Configuration Express ordering system, used to reduce the cost and accelerate the deployment of large quantities of Cisco IOS routers. Free to Cisco customers, this service enables complete pre-configuration and drop-shipment to end users.

Traffic Management with Quality of Service (QoS) Features

The Cisco 806 router supports Low Latency Queuing (often called LLQ* or PQCBWFQ) and Committed Access Rate (CAR)* allows service providers, IT Managers and resellers to guarantee or differentiate bandwidth based on a specific application or a specific user. QoS features can enable mission critical applications or delay sensitive applications such as voice and video. With QoS users can extend applications such as IP Telephony by connecting an IP Phone to the 806 router to provide interoffice phone calls back to the corporate office.

*Available Q4 CY 2001

Product Features

Multiuser Access

Network Address Translation

Integrated Four Port Hub

Accommodates PPPoE and Hostname entry

Security

NAT, creates a private network and an additional layer of network securityPAP, CHAP, MS-CHAP, D channel dialback, caller ID, and ACLs, TACACS+ protect network resources from unauthorized accessRoute and router authentication, Cisco IOS Firewall feature set, IPSec encryption, and GRE tunnelingSSH for encrypted administration

Manageability

Cisco IOS Software CLI Remote Monitoring and Troubleshooting

Remote management and monitoring via SNMP or Telnet; local management via console port

Remote debug capability using syslog

Ease of Deployment

Cisco Router Web Set Up tool

Cisco Configuration Express Support

Traffic Management

QoS features Lwo Latency Queuing (often called LLQ* or PQCBWFQ) and Committed Access Rate (CAR)*for mission critical or delay sensitive applications+

Specifications

Hardware

Table 19-156: Technical Specifications for Cisco 806

Description	Specification	
WAN	Ethernet	
Processor	Model	MPC 855T RISC
	Speed	50 MHz
Memory	Default DRAM1	16 MB
	Max DRAM	32 MB
	Default FLASH	8 MB
	Max FLASH	8 MB
Ethernet LAN	4 port 10BaseT hub	
Console	Connection	RJ-45
	LEDs	11
	Hub/No Hub Button	Yes

Table 19-157: Physical and Environmental Specifications for Cisco 806

Description	Specifcation
Operating Temperature	32 to 104°F (0 to 40°C)
Storage Temperature	–4 to 149°F (–20 to 65°C)
Humidity, operating	10 to 85%, relative humidity (noncondensing)
AC input current	0.2 to 0.4A
Frequency	50 to 60 Hz
Dimensions (H x W x D)	2.0 x 9.7 x 8.5 in. (5.1 x 24.6 x 21.6 cm)
Weight	1.48/1.5 lb (0.67/0.68 kg)

Table 19-158: Power Specifications for Cisco 806

Description	Specification
Type	external/universal
Universal	100 – 240 VAC (can use other 800 series models power supplies for spares)

Table 19-159: Regulatory Approvals for Cisco 806

Description	Specifcation
Electro Magnetic Compatibility	EN 55022, 1998 class B CISPR22, 1997 class B CFR47, Part 15, Subpart B, 1995, class B EN61000-3-3 CISPR24, 1997 EN 55024:1998
Safety Certifications	CSA/NRTL & C Approval to UL 1950, 3rd ed./CSA 22.2 No. 950-95, 3rd ed. (USA, Canada) ACA/A2LA Approval to TS001-1997, AS/NZS 3260 (Australia/New Zealand) CB Cert./Report from CSA to IEC 60950 with al country deviations CCIB Approval to GB4943-9 (China)

Software

For software specification information, access Cisco Connection Online at <http://www.cisco.com>

Ordering Information

Where to buy Cisco products

Visit http://www.cisco.com/public/ordering_info.shtml

Product and Part Numbers

Part Numbers for the Cisco 806

Part Description	Part Number
Cisco 806 Router	
Cisco 806 Broadband Gateway Router 4E, 1E	CISCO806
Cisco 806 Memory Options	
Cisco 820 DRAM upgrade 16Mbyte-20Mbyte	MEM820-16U20D
Cisco 820 DRAM upgrade 16Mbyte-24Mbyte	MEM820-16U24D
Cisco 820 DRAM upgrade 16Mbyte-32Mbyte	MEM820-16U32D
Cisco 806 Spare and Accessories	
Cisco Power Cord, 110V	CAB-AC
Cisco Power Cord Europe	CAB-ACE
Cisco Power Cord-Italian	CAB-ACI
Cisco Power Cord UK	CAB-ACU
Cisco Plug, Power Cord, Australian	CAB-ACA
Cisco Power Cord for Switzerland	CAB-ACS
Cisco Power Cord Argentina	CAB-ACR
Cisco Power Cord-Japan	CAB-JPN
Cisco 806 IOS Software Options	
Cisco 806 IOS IP	S806C
Cisco 806 IOS IP Plus	S806CP
Cisco 806 IOS IP Firewall	S806CH
Cisco 806 IOS IP Plus Firewall 3DES	S806CHK9
Cisco 806 Security Option Bundle (IOS IP Plus Firewall 3DES + Memory)	SEC800-VPN-M

Documentation

For part numbers for product specific documentation, visit

http://www.cisco.com/univercd/cc/td/doc/pcat/swdo__d1.htm